

## Supporting Information

### Well-Defined Colloidal Crystal Films from the 2D Self-Assembly of Core-Shell Semi-Soft Nanoparticles

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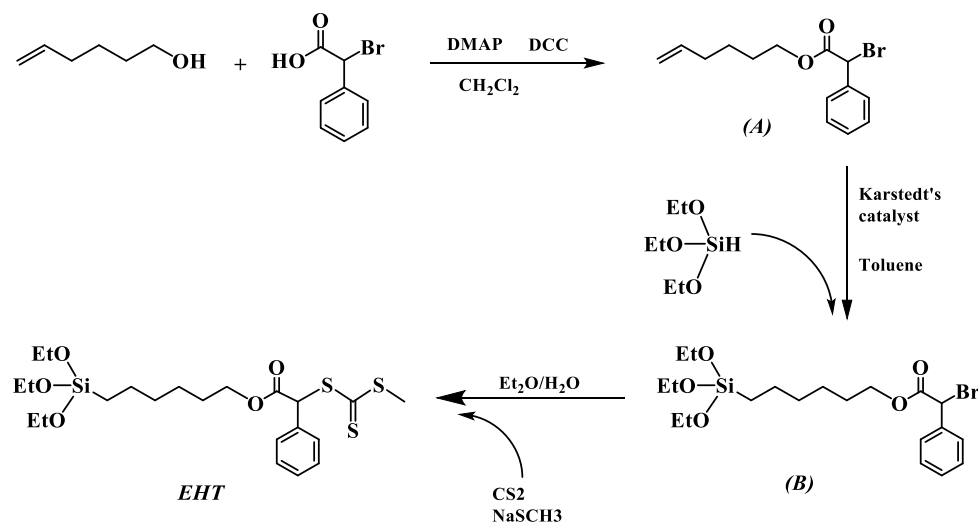
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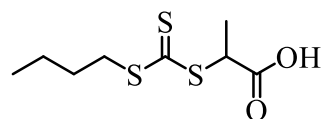
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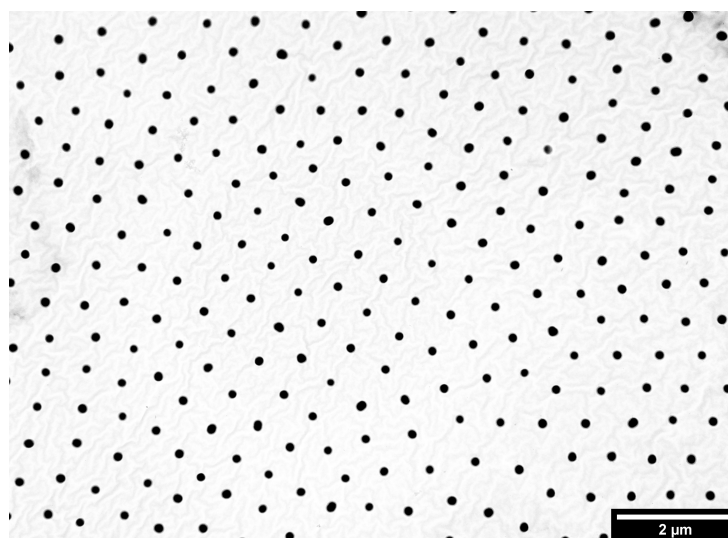


**Scheme S1. Synthetic route of RAFT Agent 6-(Triethoxysilyl)hexyl 2-(((Methylthio)- carbonothioyl)thio)-2-phenylacetate (EHT).**



**Figure S1: Structure of RAFT agent, PABTC.**





**Figure S3.** TEM image of monolayer film on a TEM grid formed of SiNP-PMMA<sub>2</sub> colloidal hybrid particles deposited on water surface.